



S&T Impact on Urban and Counter-Insurgency Operations

- A Medical Perspective -

By

MAJ Jurandir J. Dalle Lucca

Walter Reed Army Institute of Research

USAMRMC

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FACT

90% of soldiers wounded in Iraq survive their injuries (up from 76% in the Vietnam War).

- Faster is better (fast evacuation of casualties)
- Better PPE (body armor)
- Improved medical techniques
- New field medical tools



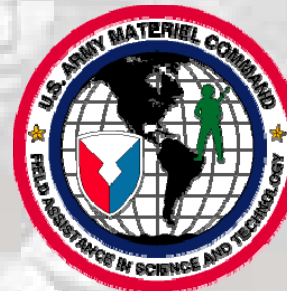
RDECOM-FAST

Science and Technology Assistance Team (STAT)

**U.S. Army Materiel
Command and
U.S. Army Medical
Research and
Materiel Command**



LTC JOSE M. ANDUJAR
RDECOM Quick Reaction Coordinator
DCSOPS, MRMCM Fort Detrick



“Making Technology Work for the Soldier”

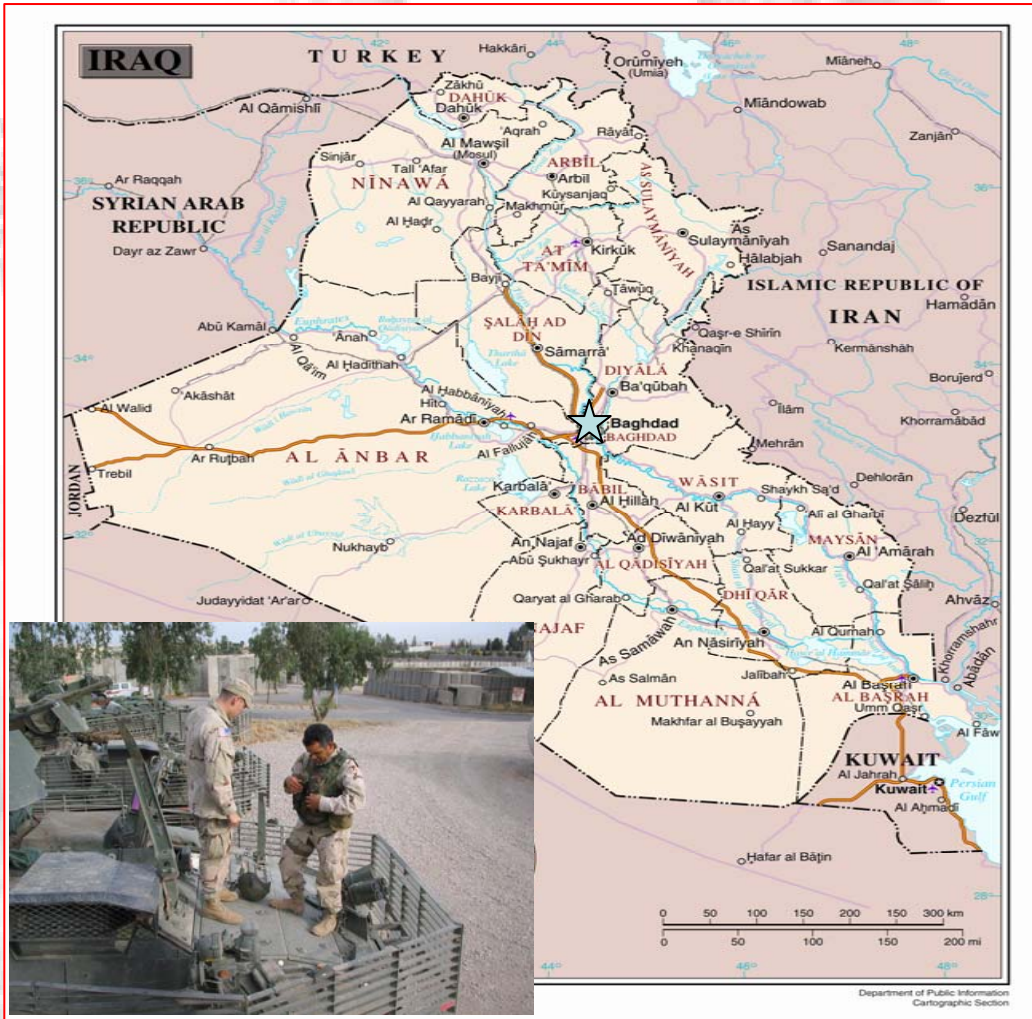


Mission

- Provide expert technical advice and support to commanders and their staff.
- Query OIF operational units on Science & Technology **capability gaps at the user level** for both current and future Combat and SASO Operations
- Provide Operational Commanders **immediate access** to the development centers within RDECOM and USAMEDCOM
- **Expedite** technology solutions to the Warfighter and act as RDECOM/AMEDD forward element to evaluate solutions



Science & Technology Assistance Team



- Science & Technology Assistance Teams (STAT) have been deployed since Apr 03.

- Each Team is Deployed for 120 Days and is located @ Camp Victory, Baghdad

- 4 member teams consisting of:

- 04/05 Tm Ldr
- GS13/15 Civilian Scientist
- E6-E9 Sr Tm NCO
- 04/05 Medical Member

STAT #14 (Nov 06- Mar 07)

LTC Margo Sosinski

SFC Craig Parker

Mr. Thomas D'Agostino

LTC Rex Berggren (Medical)

On The Ground

STAT #15 (Mar 07- Jul 07)

LTC Karen Walters

SFC Santos Martell

Mr. Karl Tebeau

MAJ Kelly Halverson (Medical)

On Deck



S&T LNO (Afghanistan)



- Science & Technology Liaison Office (S&T LNO) has been deployed since May 06.

- Each S&T LNO is Deployed for 179 Days and is located with TF Paladin @ Bagram

- S&T LNO is MAJ/LTC

LTC CHUCK MARR
XVIII Abn Corps
Uniformed Army S&E
OCT 06- MAR 2007

*On The
Ground*

TBD

MAR - August 2007

On Deck



So what? Over 18 months and four iterations...



Ground and Air Travel

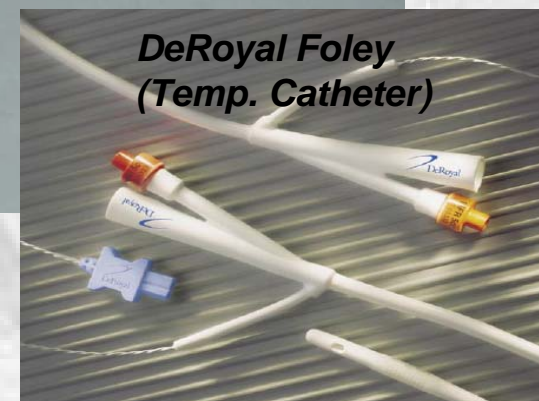
From Basrah to Mosul

From Tikrit to Balad

60+ Medical Units
47+ Reported Issues
37+ Projects Initiated



New Fielded Items in Theater





New Fielded Items in Theater

Patient Controlled Analgesia (PCA)





Hextend®

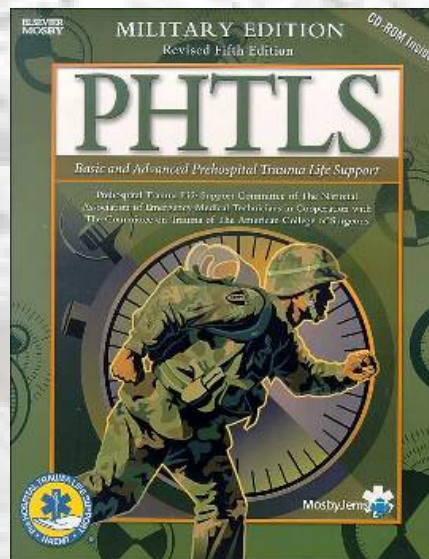


Capability Gap: Combat Casualty Care

Issue in Theater: FAST team member found that BN Surgeons were reluctant to issue Hextend to CLS and were not recommending its use in theater.

System Description/CONOPS: Resuscitation fluids are necessary for the treatment of injured Soldiers who have lost so much blood that their blood pressure is low. Currently, lactated Ringer's and Hextend are available in the field for use.

Solution: USARIEM and USAISR compiled medical literature providing clinical information that Hextend is safe for use and more effective than Lactate Ringer as a resuscitation fluid. Information paper was distributed to medical theater leadership and today Hextend is the resuscitation fluid of choice.





So...
What's in the pipeline?



Future Force—Medical



Combat Casualty Care



**Improved
Treatment for
Head Injuries**



**Regenerative
Therapies**



**Far-Forward
Resuscitation &
Hemorrhage Control**



**Semi-
Autonomous
Intensive Care &
Transport System**

Infectious Diseases



**Malaria
Treatment
Drugs**

**Malaria
Prevention
Vaccines**



Dengue Prevention Vaccines



**Malaria Rapid
Diagnostic Device**

Operational Medicine

**Remote Monitoring
of Warfighter Health
and Performance**



**Performance Test for
Future Lightweight
Body Armor Systems**



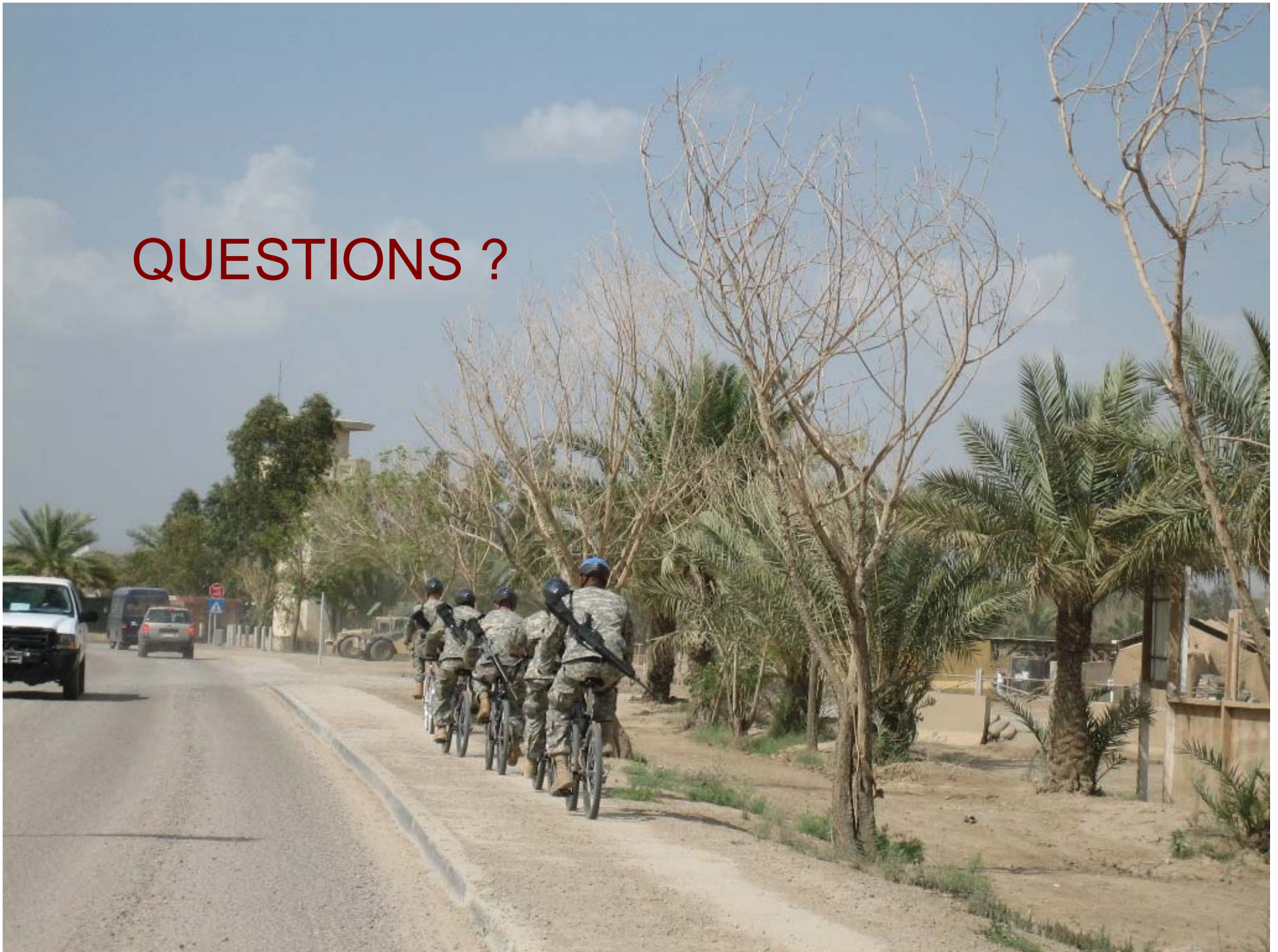


THANKS

- COL Nancy Vause
- COL Harry Slife
- LTC Stephen Dalal



QUESTIONS ?





Quick Reaction Coordinators Communication Nodes at Army Labs & Centers



Mr. Ronald Scotka
U.S. Army Test & Evaluation Command
(703) 806-3662, DSN 656

Ms. Deirdre Sumpter
U.S. Army Developmental Test Command (DTC)
(410) 278-1428, DSN 298

Mr. Richard A. Herrmann
**Engineer Research & Development Center (ERDC)
Topographic Engineering Center (TEC)**
(703) 428-6800, DSN 364

LTC Jose M. Andular
**Medical Research and Materiel
Command (MRMC)**
(301) 619-3312, DSN 343

Mr. Richard Davis
Oak Ridge National Lab (ONRL)
(865) 574-5925

Mr. John Dertzbaugh
PEO Soldier
(703) 704-0082, DSN 654

Ms. Kathy Herring
RDECOM Aviation & Missile RDEC (AMRDEC)
(256) 313-2416, DSN 746

Mr. George Alexander
RDECOM Army Materiel Systems Analysis Activity (AMSAA)
(410) 278-6742, DSN 298

Ms. Marisel Lipinski
**RDECOM Armament Research, Development &
Engineering Center (ARDEC)**
(973) 724-7942, DSN 880

Mr. Robert Piacente
RDECOM/ARDEC – Benet Lab
(518) 266, 5002, DSN 374

Mr. Joseph Spellman
**RDECOM/U.S. Army Research Laboratory
(ARL)**
(301) 394-3492, DSN 290

Mr. Barry Fornoff
**RDECOM/ARL/Computational & Information
Sciences Directorate (CISD)**
(301) 394-3871, DSN 290

Mr. Bruce Amrein
**RDECOM/ARL/Human Research &
Engineering Directorate (HRED)**
(410) 278-9398, DSN 298

Mr. Jim Chopack
**RDECOM/ARL/Sensors & Electron
Devices Directorate (SEDD)**
(301) 278-3529, DSN 298

Ms. Cheri Hardin
**RDECOM/ARL/Survivability/Lethality
Analysis Directorate (SLAD)**
(410) 278-9398, DSN 298

LTC James Moffatt
**RDECOM/ARL/Vehicle Technology Directorate
(Management Support Group) (VTD)**
(757) 864-2035

Mr. Michael McNeir
**RDECOM/ARL/Weapons & Materials Research
Directorate (WMRD)**
(410) 278-3869, DSN 298

Dr. Francis X. Hurley
RDECOM/Army Research Office (ARO)
(919) 549-4322, DSN 832

Mr. Robert Zanzalari
**RDECOM/Communications-Electronics
Research, Development and Engineering
Center (CERDEC)**
(732) 532-0362, DSN 992

Mr. Sean O'Malley
Training and Doctrine Command (TRADOC)
(757) 788-3478, DSN 680

Mr. Marc Gutleber
**RDECOM/CERDEC/
Command & Control Directorate (C2D)**
(732) 427-7409, DSN 987

Mr. William N. Porter
**RDECOM/CERDEC Intelligence & Information
Warfare Dir (I2WD)**
732-427-6451, DSN 987

Mr. Al Van Landuyt
**RDECOM/CERDEC Night Vision and Electronic
Sensors Directorate (NVESD)**
(703) 704-1360, DSN 654

Mr. Jeff Keehn
RDECOM/CERDEC (S&TCD)
(732) 427-2281, DSN 987

Mr. Keith Knight
**RDECOM/Edgewood Chemical
Biological Center (ECBC)**
(410) 436-2621, DSN 584

Mr. Max Biela
**RDECOM
Natick Soldier Center (NSC)**
(508) 233-5413, DSN 256

Mr. Gene Wiehagen
**RDECOM
Simulation, Training & Technology Center (STTC)**
(301) 619-3268, DSN 343

Mr. Sam Pone
Tank Automotive & Armament Command (TACOM)
(586) 574-5708, DSN 786

Mr. Russell Robinson
Space & Missile Defense Battle Lab (SMDBL)
(719) 554-4203, DSN 692

VACANT
TACOM/Rock Island (TACOM/RI)
Rock Island, IL



References

- USAMRMC archives
- www.nationalgeographic.com
- <http://icasualties.org/oif>



REF Works with MEDCOM to Equip OEF CSHs with Operating Room Lights



- FSH surgeons in OEF were attaching penlights to their headgear while conducting surgical procedures.
- The REF team in Afghanistan submitted a purchase request for OR lights to improve the inadequate lighting.
- Through coordination with MEDCOM, the REF purchased 6ea OR lights as a stopgap solution until MEDCOM's new prototype is ready for distribution – which is not expected for at least 6-8 months.

6 JUN 06: 6ea Arrived in Theater; Put into operation within 5 days.

12 JUN 06: Above picture submitted to demonstrate use at a CS on FOB Salerno

Dash Mounted Controller



New Fielded Items in Theater

Operational Concept: To increase survivability of severe injured soldiers by decreasing time to start plasma infusion at the Forward Surgical Teams (+, which means with freezer capability and both Combat Support Hospitals).

Organizational Concept: CSH(-) and FSTs are strategically in theater to provide level 2 and 3 of care to current offensive operations in OEF. Casualties will arrive by MEDEVAC in critical condition at these medical units where they receive better treatment with increased changes of survivability.

Procurement Objective: Fill current OEF medical capability gap of delayed availability to utilize frozen plasma in severely injured soldiers.

Support Requirements: TFMED will work in partnership with REF to provide system maintenance support, distribution and user's feedback report directly to REF-Afghanistan

QuickTaw

